

Notice of Allowability

Application No.

09/699,897

Applicant(s)

COOPER, MATTHEW S.

Examiner

Rodney G. McDonald

Art Unit

1753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Request for Continued Examination filed 1-14-05.
2. ☒ The allowed claim(s) is/are 28-37 and 39-45.
3. ☒ The drawings filed on 27 October 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 1-14-05
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


RODNEY G. McDONALD
PRIMARY EXAMINER

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

Claims 28 and 34-37 are allowable over the prior art of record because the prior art of record does not teach the claimed PVD component consisting essentially of a material having a face-centered cubic crystalline structure, the component being produced by the method comprising inducing a sufficient amount of residual stress in the component to increase magnetic pass through flux exhibited by the component during PVD compared to pass through flux exhibited without inducing the stress.

Claims 29 and 39-42 are allowable over the prior art of record because the prior art of record does not teach the claimed sputter component produced by the method of unidirectionally first cold working a component blank to at least about an 80% reduction in cross-sectional area, the component blank consisting essentially of a material having a face-centered cubic crystalline structure; heat treating the cold worked component blank at least at about a minimum recrystallization temperature of the component blank; and inducing a sufficient amount of stress in the heat treated component blank to increase magnetic pass through flux exhibited by the heat treated component blank compared to pass through flux exhibited prior to inducing stress.

Claims 30 and 43 are allowable over the prior art of record because the prior art of record does not teach the claimed sputter target produced by the method utilizing the claimed steps such that at least 70% of a surface area at least within selected boundaries of a surface of the second cold rolled target blank exhibit a (200) texture.

Art Unit: 1753

Claims 31-33 are allowable over the prior art of record because the prior art of record does not teach the claimed subject matter including a PVD component consisting essentially of nickel exhibiting a (200) texture over at least about 50% of a surface area at least within selected boundaries and having a sufficient amount of residual stress to exhibit higher magnetic pass through flux compared to pass through flux exhibited absent such stress.

Claim 44 is allowable over the prior art of record because the prior art of record does not teach the claimed subject matter including a PVD component consisting essentially of material having a face-centered cubic crystalline structure, the material exhibiting a (200) texture over at least about 70% of a representative surface area, having a sufficient amount of residual stress in the component to increase magnetic pass through flux exhibited by the component during PVD compared to pass through flux exhibited by the component during PVD compared to pass through flux exhibited without inducing the residual stress, but such induced residual stress alone not being sufficient to substantially alter surface grain appearance.

Claim 45 is allowable over the prior art of record because the prior art of record does not teach a PVD component produced by the claimed method including inducing a sufficient amount of residual stress in the blank to increase magnetic pass through flux exhibited by the component during PVD compared to pass through flux exhibited without inducing the residual stress, at least about 70% of a surface of the second cold worked blank exhibiting a (200) texture and the induced residual stress alone not being sufficient to substantially alter surface grain appearance.

Also of record Bartholomeusz et al. (U.S. Pat. 6,123,783) teaches away from a product having the predominant phase being face centered cubic or having a 200 texture and does not suggest methods including cold working and heat treating to produce a product having a predominant phase being face centered cubic or having a 200 texture.

Also of Taniguchi et al. (U.S. Pat. 5,334,267) does not describe the required face centered cubic structure or a 200 texture in the target and equates the way the target can be worked to achieve certain target results thus teaching away from selecting cold working and heat treating as required by Applicant's claims.

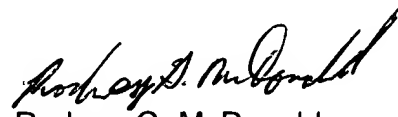
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney G. McDonald whose telephone number is 571-272-1340. The examiner can normally be reached on M- Th with Every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X. Nguyen can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1753

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Rodney G. McDonald
Primary Examiner
Art Unit 1753

RM
January 25, 2005